# Maple Sugaring in Massachusetts

assachusetts maple producers vary in size from those making less than 100 gallons of syrup, to those making 2000 gallons or more. Many are in the 100 to 500 gallon production range, and the state's annual production averages about 50,000 gallons, worth about two million dollars. Most of the operating sugarhouses are in the western counties, where maple syrup is often a significant part of overall farm income.

Massachusetts ranks 8th out of the 11 major maple-producing states. Canada Produces more of the world's maple syrup than all of the United States combined, most of it being made in Quebec. Maple states listed in

the normal-year order of production are: Vermont, New York, Wisconsin, New Hampshire, Michigan, Ohio, Pennsylvania, Massachusetts, Minnesota, Maine, and Connecticut. Small amounts of maple syrup are made in the higher elevations of other Mid-Atlantic states like Virginia and West Virginia. World production totals about 4 million gallons annually, primarily all made during the months of March and April.

## Making Maple Syrup

Making maple syrup requires freezing nights and warm (but preferably not over 50 degree) days. These must alternate, and be in a long enough series to allow sap to move in the trees. Prolonged periods of either below freezing temperatures or days without freezing nights will stop the sap flow. As a result, sugarhouses often start and stop boiling at different times due to local climatological factors, with the general geographic progression being a reverse of the foliage season. That is, the lower elevations and more southern regions usually start their maple seasons before the higher elevations and more northerly areas.

Prolonged warm spells or cold snaps during the season may halt sap flow for several days, and it may start again when conditions are favorable, As a result, 24 hour work days are often interspersed with two three or even more days of relative inactivity (while we try to recover lost sleep, make repairs, clean equipment, and get ready for the next sap "run").

It takes about 40 gallons of maple sap, gathered and boiled down, to make one gallon of pure maple syrup. This is done in a device called an evaporator - a large furnace covered with huge flat pans, burning either oil or wood for fuel.

It commonly takes about one cord of wood or 60 gallons of oil to boil down 800 gallons of maple sap to make 20 gallons of syrup. Depending on the size of the evaporator and the number of trees from which sap is gathered, this may represent anywhere from two hours to two whole days of boiling.

Some sugarhouses are beginning to use "reverse osmosis" machines (a kind of high-pressure reverse filter) to remove some of the water from the sap before boiling. These machines greatly reduce time and fuel needed for boiling but they cost \$5000 or more and often require major modifications to the sugarhouse (better electrical service, different sap storage setups and sometimes smaller evaporators due to the sweeter sap). As a result, cost and maintenance factors dictate who uses the most modern "improvements."

Basically, making maple syrup is still a very labor and fuel intensive business. Quality control and standardized grading have improved greatly over the years, but the gathering, boiling, cleaning up, and marketing process continues in time-honored fashion.

### Marketing Maple Products

Most Massachusetts sugarmakers retail their maple products through on-farm sales (especially during sugaring season), mail order (especially around Christmas time), and at small stores and roadside stands. The Massachusetts Maple Producers Association has worked closely with the state Department of Food and Agriculture's "Massachusetts grown...and fresher!" program to reduce the need to wholesale bulk syrup out of state to big syrup packers in Vermont and New York.

More maple syrup is consumed within the state than our sugarmakers can produce, so it serves everyone's best interest to market our product within the state. Our members now enjoy an increased retail market for their products, largely due to public demand for locally produced agricultural commodities. The Association prints brochures, distributes standardized containers, and represents our sugarmakers at numerous public events - the most notable being our booth in the Massachusetts building at the Eastern States Exposition (The Big-E) in September.

There is no real competition for pure maple products in the marketplace. Corn sweeteners, many of them marketed using the "maple" image, contain either less than five percent or absolutely no real maple syrup. People who know the taste of pure maple syrup rarely are satisfied with a substitute, even when it is both cheaper and easier to find.

## Maple Syrup Grades

An increasing number of customers now ask the sugarmakers for the darker grades of syrup as opposed to the lightest grade. Maple syrup is graded by color according to USDA standards. Intensity of flavor (some say less "delicate" flavor) increases as the grade darkens. The density (percent sugar) of all grades is the same. Table syrup is graded as Light Amber, Medium Amber, and Dark Amber; with the lighter syrup having a more delicate flavor and the darker syrup having a stronger or more "mapley" flavor. Grade B syrup is a heavy flavored syrup excellent for baking or for barbecuing. It can have a caramel flavor which some people prefer, even for table use.

# Maple Production: Part of Massachusetts Agriculture

Public awareness of Massachusetts agriculture is growing. As Bay State maple producers strive to develop local markets, the public is looking for fresh produce from their neighbors. We hope to link these sources for their mutual benefit. We thank you for your support.

#### Massachusetts Maple Producers Association

The Massachusetts Maple Producers Association is a non-profit organization representing maple sugar producers in our state. The association has approximately 200 members, including most of the Commonwealth's commercial sugarhouses.

Massachusetts Maple Phone (413) 628-3912 for season updates.

www.massmaple.org info@massmaple.org